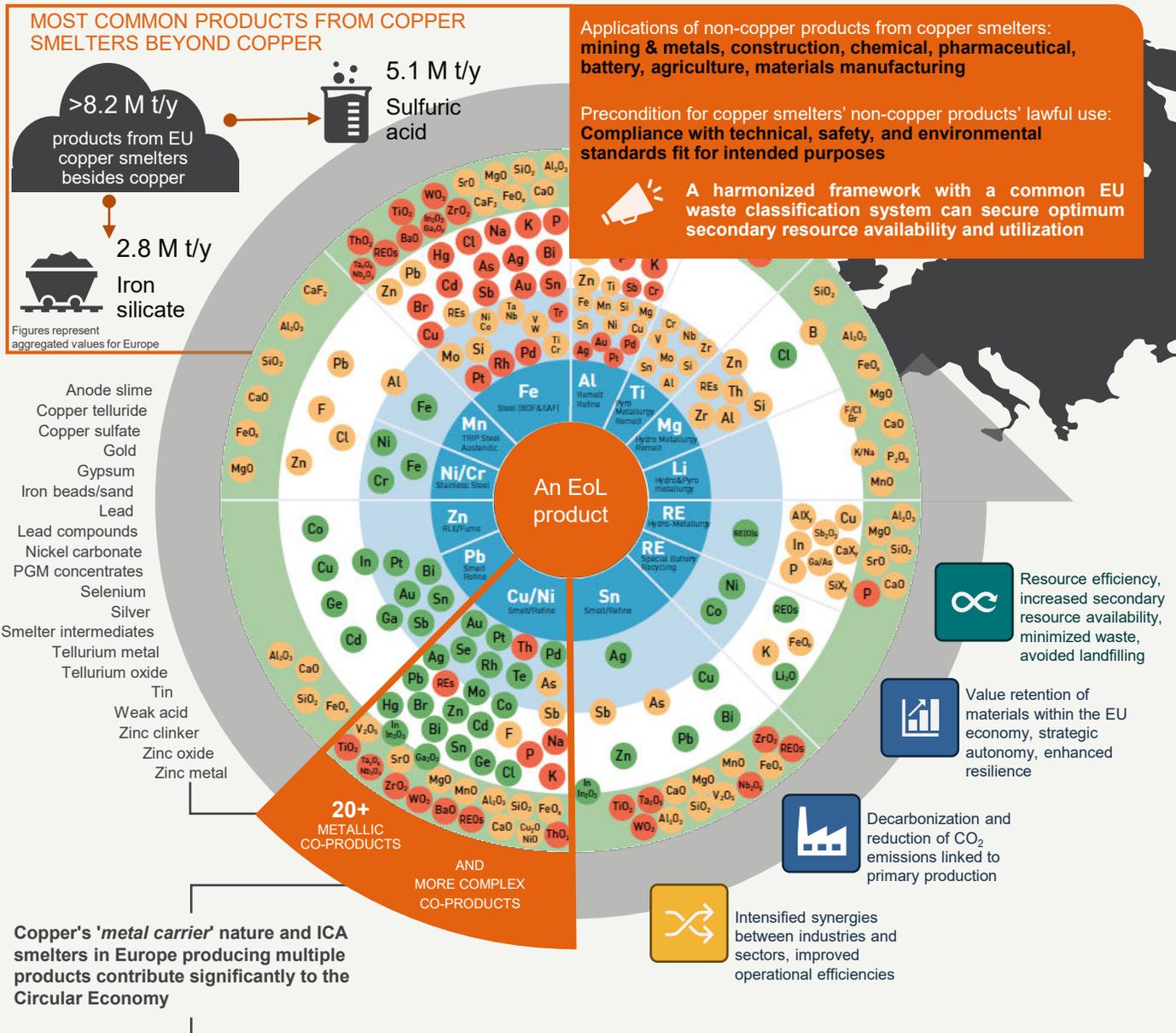


INDUSTRIAL SYMBIOSIS: THE CONTRIBUTION OF EU COPPER SMELTERS' NON-COPPER PRODUCTS TO CIRCULAR ECONOMY

The increasing demand for metals driven by the imperative shift towards decarbonization and the transition to Circular Economy, coupled with the nature of copper as 'carrier' of over 20 base, precious, and specialty metals, require an interconnected industrial network for metallurgical production. This can maximize recovery of all elements contained in End-of-Life (EoL) products. For this reason, responsible resource management emerges as a central focal point for copper smelters.

In Europe, copper smelters are actively engaged in advanced metallurgical processes that extend beyond the production of copper cathodes, encompassing the efficient recovery of a diverse array of metals. These secondary streams are seamlessly integrated into the operations of copper smelters. They hold tangible economic value as they cover existing market demand while adhering to specific product standards and requirements. Failure to recycle and recover these metal streams within the smelting facility itself or in another non-ferrous metal site, hinders their availability and utilization in the EU economy, resulting in the unrealized potential of valuable resources.



BENEFITS

- Less primary resources needed
- Closing the material loop
- Reduction of the environmental & carbon footprint
- Minimisation of waste
- Increased synergies across industries